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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,130	07/30/2001	Robert O. Bruckner	INTL-0645-US (P12309)	1396

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EXAMINER	
CHEN, TSE W	

ART UNIT	PAPER NUMBER
2116	4

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/918,130	BRUCKNER ET AL.	
	Examiner	Art Unit	
	Tse Chen	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the missing section Brief Summary of the Invention. See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention. Appropriate correction is required.

2. Claims 12 and 13 are objected to because of the following informalities:

- As per claim 12, "said other components" on lines 2-3 should be corrected to "said power consuming components" in order to correspond with the established antecedent; and
- As per claim 13, "powering down powering down" on line 7 should be corrected to "powering down".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6, 7-12, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hussain et al., U.S. Patent 6172611, hereinafter Hussain, in view of Ceccherelli et al., U.S. Patent 5763960, hereinafter Ceccherelli.

5. As per claim 1, Hussain taught an invention for monitoring the thermal state of a computer system, the invention comprising of:

- Receiving an indication of a thermal event in a processor [column 4, lines 11-17; column 5, lines 13-19], the processor being part of a computer system [FIG. 1, item 130]; and
- In response to the indication, powering down the processor [column 5, lines 19-20].

6. However, Hussain did not disclose expressly a power down sequence.

7. Ceccherelli taught an invention for powering down a computer system [FIG. 4], the invention comprising of:

- Powering down the processor [column 12, lines 4-9]; and
- Subsequent to the powering down of the processor, powering down other components of the computer [column 12, lines 9-14].

8. An ordinary artisan at the same time the invention was made would have been motivated to look for a way to efficiently power down a computer system in a controlled sequence [Ceccherelli: column 2, lines 22-41].

9. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ceccherelli and Hussain because of the aforementioned motivation and also their involvement in similar problems regarding the safe power down of computer systems.

10. As per claim 2, Ceccherelli taught other components are located on a motherboard of the computer system [column 8, lines 7-10].

11. As per claim 3, Ceccherelli taught introducing a predetermined delay after the receiving before said powering down other components of the computer [column 1, lines 28-30; column 10, lines 8-19].

12. As per claim 4, Ceccherelli taught powering down other components to comprise of controlling a state of a signal indicative of a mechanical power switch of the computer system [column 3, lines 27-38].

13. As per claim 5, Ceccherelli taught powering down the processor to comprise of cutting off a supply voltage to the processor [column 11, lines 63-67; column 12, lines 4-8].

14. As per claim 6, Ceccherelli taught powering down other components to comprise of cutting off at least one supply voltage to the other components [column 11, lines 63-67; column 12, lines 10-12].

15. As per claim 7, Hussain taught an invention for monitoring the thermal state of a computer system, the invention comprising of:

- A processor capable of indicating a thermal event [FIG. 1, item 130];

- A circuit to receive an indication of a thermal event in the processor [column 4, lines 11-17; column 5, lines 13-19]; and
- In response to the indication, powering down the processor [column 5, lines 19-20].

16. However, Hussain did not disclose expressly a power down sequence.

17. Ceccherelli taught an invention for powering down a computer system [FIG. 4], the invention comprising of:

- Power consuming components [FIG. 4, item 403];
- A power supply subsystem to supply power to the processor and power consuming components [FIG. 4, item 404]; and
- A circuit to cause the power supply subsystem to power down the processor before powering down the power consuming components [column 12, lines 4-9, lines 9-14].

18. An ordinary artisan at the same time the invention was made would have been motivated to look for a way to efficiently power down a computer system in a controlled sequence [Ceccherelli: column 2, lines 22-41].

19. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ceccherelli and Hussain because of the aforementioned motivation and also their involvement in similar problems regarding the safe power down of computer systems.

20. As per claim 8, Ceccherelli taught the power consuming components are located on a motherboard of the computer system [column 8, lines 7-10].

21. As per claim 9, Ceccherelli taught introducing a delay in powering down the power consuming components [column 1, lines 28-30; column 10, lines 8-19].

22. As per claim 10, it is well known in the art to have a mechanical switch to turn power to the computer system on and off. Ceccherelli further taught the circuit controlling the state of a signal indicative of the mechanical power switch of the computer system [column 3, lines 27-38].

23. As per claim 11, Ceccherelli taught the power supply subsystem powers down the processor by cutting off a supply voltage to the processor [column 11, lines 63-67; column 12, lines 4-8].

24. As per claim 12, Ceccherelli taught the power supply subsystem powers down the power consuming components by cutting off at least one supply voltage to the power consuming components [column 11, lines 63-67; column 12, lines 10-12].

25. As per claim 13, Hussain taught an invention for monitoring the thermal state of a computer system, the invention comprising of:

- Receiving an indication of a thermal event in a processor [column 4, lines 11-17; column 5, lines 13-19], the processor being part of a computer system [FIG. 1, item 130]; and
- In response to the indication, powering down the processor [column 5, lines 19-20].

26. However, Hussain did not disclose expressly a power down sequence.

27. Ceccherelli taught an invention for powering down a computer system [FIG. 4], the invention comprising of:

- In response to powering down, introducing a delay [column 1, lines 28-30; column 10, lines 8-19];
- Powering down the processor [column 12, lines 4-9] before the expiration of the delay [column 10, lines 8-19]; and
- Powering down other components of the computer [column 12, lines 9-14] in response to the expiration of the delay [column 10, lines 8-19][1].

28. An ordinary artisan at the same time the invention was made would have been motivated to look for a way to efficiently power down a computer system in a controlled sequence [Ceccherelli: column 2, lines 22-41].

29. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ceccherelli and Hussain because of the aforementioned motivation and also their involvement in similar problems regarding the safe power down of computer systems.

30. As per claim 14, Ceccherelli taught other components are located on a motherboard of the computer system [column 8, lines 7-10].

31. As per claim 15, Ceccherelli taught powering down other components to comprise of controlling a state of a signal indicative of a mechanical power switch of the computer system [column 3, lines 27-38].

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[1] Delay is introduced when the voltage threshold for the processor is met. The processor is then powered down within the delay interval before expiration of the delay due to the reaching of the next voltage threshold that would finally cause the powering down of the other components.

32. As per claim 16, Ceccherelli taught powering down the processor to comprise of cutting off a supply voltage to the processor [column 11, lines 63-67; column 12, lines 4-8].

33. As per claim 17, Ceccherelli taught powering down other components to comprise of cutting off at least one supply voltage to the other components [column 11, lines 63-67; column 12, lines 10-12].

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Ko, U.S. Patent 6192479, disclosed an invention for power management with thermal sensing circuit.

b. Reneris, U.S. Patent 5784628, disclosed an invention with power down sequence in a computer system.

c. Narad et al., U.S. Patent 5692197, disclosed an invention with a timer for power management events.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tse Chen whose telephone number is (703) 305-8580. The examiner can normally be reached on Monday - Friday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tse Chen
May 3, 2004

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